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EXAMINER
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LOWEN, ALYSSA

ART UNIT	PAPER NUMBER
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3714

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/764,169

Applicant(s)

TRIPOLI, MELCHIORE (MIKE)

Examiner

Alyssa M. Lowen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS; WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 11 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/28/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 4-28-2005 is in compliance with the provisions of 37 CFR 1.97 and 37 CFR 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

2. The disclosure is objected to because of the following informalities: The number "10" appears out of context on page 7 lines 1 and 18, page 8 line 15, and page 9 lines 3 and 11. Appropriate correction is required.

### ***Claim Objections***

3. Claims 11 and 20 are objected to because of the following informalities. Claim 11 has slightly confusing wording with the phrase "comprised having" and the number "20" appearing out of context. In claim 20, the word "the" has the number zero attached to it. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 recites the limitations "the polyethylene surface" and "the nylon film" in line 3. There is insufficient antecedent basis for these limitations in

the claim. Claim 7 also recites the limitation "the polyethylene surfaces" in line 4. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 8-9, 11-12, 14, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Carignan (5795211). Regarding claim 1, Carignan discloses a method for attaching a component to the film of an inflatable object, where the component is a semi-rigid lead member (10) with flat copper wires connected to a lamp (15) where the wire portion is coated with the heat activatable material polyethylene (column 3 lines 44-47) in order to heat and pressure seal the component to the interior of the inflatable object using upper and lower heated dies (column 4 lines 7-15). The film of the inflatable object is comprised of a plastic material having two surfaces, an inner surface made of polyethylene and an outer surface of metalized nylon (column 1 lines 34-40). Regarding claim 2, the interior surface of the film is comprised of polyethylene (column 1 line 34). With regard to claims 3 and 4, a surface of the component is covered with a heat activatable adhesive in the form of polyethylene (column 3 line 47). Regarding claims 8 and 14, the lead member is attached to a transducer (claim 10) where the transducer is a sound generator (column 5 lines 47-48). Regarding claim 9, the outer surface of the film is a nylon film having a metalized skin

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(column 1 line 39). With regard to claims 11 and 12, the inflatable object has a first film (42) with a nylon outer layer and a plastic polyethylene inner layer to which is heat sealed the lead member component (column 4 line 37-38) with attached light diodes. The lead and diode assembly (51) is then located within a sealed envelope formed by a second film (41), having a nylon outer layer and plastic polyethylene inner layer, heat sealed about the periphery with the first film (abstract). Regarding claims 21-25, Carignan discloses an inflatable object adapted to contain an inflating gas such as air (column 4 lines 7-8) with a plastic inner surface of polyethylene (column 1 line 34) to which is heat sealed a component having a heat activatable adhesive of polyethylene on one surface (column 3 line 47) and can produce either sound or light depending on the configuration.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan in view of McGrath (5378299). The method of Carignan discloses the basic inventive concept, substantially as claimed with the exception of the film and component being heat sealed together by a heater that is movable between a position away from the two parts and in close proximity to the two parts. However, McGrath shows this feature to be old in the heat-sealing balloon art. McGrath discloses a heated die (160) that is movable in the vertical direction (Fig. 10) in order to heat and pressure seal balloon film about a valve. It would have been obvious to one of ordinary skill in the art at the time of invention from the teaching of McGrath to modify the heating dies of Carignan by having the movable die be heated in order to keep the heat source away from the film until the actual heat-sealing step occurs in case a correction needs to be made, avoiding the possibility the two parts would start to fuse together before the problem is rectified. Regarding claim 13, McGrath further discloses the step of advancing the film (141) and then stopping the film (column 8 line 36) in order to heat and pressure seal the valve between the balloon films (Fig. 10). Therefore, it would have been obvious to one of ordinary skill in the art that the method of Carignan would require the film to be stopped in order to heat and pressure seal the film and component together.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan and McGrath as applied to claim 5 above, and further in view of Carnegie Jr. (4055456). Carignan and McGrath disclose the basic inventive concept, substantially as claimed with the exception of the heater being coated with a non-stick surface. However,

Carnegie Jr. discloses a heater with an applied non-stick layer (column 4 line 53) showing this feature to be old in the heat-sealing art. It would have been obvious to one of ordinary skill in the art at the time of invention from the teaching of Carnegie Jr. to modify the heater of Carignan and McGrath to have a non-stick surface in order to prevent the film from adhering to the heater die.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan and McGrath as applied to claim 5 above, and further in view of Ehrreich (3149017).

Carignan and McGrath disclose the basic inventive concept, substantially as claimed with the exception of a protective material being positioned between the heater and the polyethylene surface of the film. Ehrreich discloses polytetrafluoroethylene sheets (4 and 5) positioned between steel plates (6 and 7) used for applying heat and pressure to the configuration, showing this feature to be old in the in the heat-sealing art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention from the teaching of Ehrreich to modify the method of Carignan and McGrath to include protective sheets in order to prevent the film from adhering to the heater.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan in view of Graf (4600358). The method of Carignan discloses the basic inventive concept substantially as claimed with the exception of a robotic arm that transports the component from a remote location onto the film in a predetermined position. Graf, however, discloses a mechanical arm that can move work pieces between two points in a plane (abstract). Even though Graf does not expressly disclose the use of the robotic arm for attaching a component to a balloon film, it does provide a

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means for moving an object from one location to another. It would have been obvious to one of ordinary skill in the art at the time of invention from the teaching of Graf to include a robotic arm to transport the component to the film during manufacture in order to more quickly and accurately execute the process.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan. Carignan disclose the inventive concept substantially as claimed as applied to claim 14 above but does not expressly disclose a sound module comprised of foam material coated with a heat activatable material. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the sound module comprised of foam material because Applicant has not disclosed that using a foam material provides an advantage or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the lead member coated with polyethylene connected to a sound generator because this alternative also allows the sound generator to be heat sealed into the balloon without it directly being covered in the heat activatable material.

15. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan and McGrath in view of Graf. Carignan discloses a component having heat activated polyethylene coating (column 3 lines 44-47) located on the film at a selected location with the coated surface in contact with the inner plastic surface of the film (Fig. 7). McGrath discloses a component within an inflatable object having a system for moving a film (column 7 lines 67-68) having a plastic surface (column 3 line 45), means to stop the film (column 8 line 36) and a heater adapted to be displaced



away from the assembly but that can be moved to a location near the film and component in order to heat seal the two (Fig. 10). The method of Carignan and McGrath discloses the basic inventive concept, substantially as claimed with the exception of a placement mechanism adapted to position a component onto the surface of a film. Graf, however shows a mechanical arm that can move work pieces between two points in a plane (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention from the teaching of Graf to include a placement mechanism to transport the component to the film during manufacture in order to more quickly and accurately execute the process. Regarding claim 20, the placement mechanism is a robotic arm (Fig. 1).

16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan, McGrath and Graf. The references disclose the inventive concept substantially as claimed as applied to claim 16 above but does not expressly disclose a piston being used to raise and lower the heater. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the heater movable by piston because Applicant has not disclosed that using a piston provides an advantage or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the actuator (column 8 line 4) described by McGrath because it causes the die to move in a vertical direction same as the piston would have done.

17. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carignan, McGrath and Graf as applied to claim 16 above, and further in view of

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Ehrreich. The method of Carignan, McGrath and Graf discloses the basic inventive concept, substantially as claimed with the exception of a protective material of polytetrafluoroethylene positioned between the heater and film during the heating process. However, Ehrreich discloses polytetrafluoroethylene sheets (4 and 5) positioned between steel plates (6 and 7) used for applying heat and pressure to the configuration. It would have been obvious to one of ordinary skill in the art at the time of invention from the teaching of Ehrreich to modify the method of Carignan, McGrath and Graf to include protective sheets in order to prevent the film from adhering to the heater.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Lowen whose telephone number is (571) 272-2684. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Chanda Harris can be reached on 571-272-4448. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AML

*Chanda L. Harris*  
**CHANDAL HARRIS**  
**PRIMARY EXAMINER**